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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/357,220	07/20/1999	YOSHIKAZU OCHI	450100-4991	8900
20999	7590	05/11/2005	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			TRAN, NHAN T	
			ART UNIT	PAPER NUMBER

2615

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/357,220

Applicant(s)

OOCHI, YOSHIKAZU

Examiner

Nhan T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed 1/12/05 and RCE 2/7/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/12/2005 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground of rejection.

Claim Objections

3. Claims 1-8 are objected to because of the following reason:

Regarding claims 1-8, each claim recites the limitation of the stored charges are read out... The limitation "the stored charges" is unclear since there are two different antecedent stored charges for a first field and a second field of a particular frame, and the stored charges in the first field is discharged which cannot be read out. The Examiner suggests the Applicant to

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change "the stored charges" to --the stored charges of the second field-- . Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Kuroda et al (US 4,564,766).

Regarding claim 2, Kuroda discloses an imaging sensing method comprising steps of:

controlling an electronic shutter of a solid image sensor which outputs an image sensing signal in a progressive scan mode (frame integration mode) at a field cycle of a standard television system (NTSC) used as a basic cycle (1/60 second or 16.7ms), said solid image sensor including a plurality of pixel sensors; and processing charges accumulated on said plurality of pixel sensors as the image sensing signal including: discharging the charges accumulated and stored for a first field (even field of rows 2, 4, 6,...) of a particular frame before storing the charges accumulated for a second field (odd field of rows 1, 3, 5,...) of the particular frame; and reading out the stored charges in next two fields of a subsequent frame; and outputting the image

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sensing signal from the solid image sensor in the progressive scan mode. See col. 3, line 18 – col. 4, line 25, wherein NTSC standard cycle is defined in col. 2, lines 35-37.

It is noted that the limitation “reading out the stored charges in the next two fields of a subsequent frame” is inherently met by Kuroda for *at least* a reading period for reading out charges of a current frame from the vertical transfer 7 to an inherent horizontal transfer during next fields of a subsequent frame being integrated because of an inherent time lag for reading out charges from a vertical transfer to a horizontal transfer in such a CCD image sensor that causes the reading period to fall into integration periods of subsequent fields.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al (US 4,564,766) in view of Inuiya (US 6,222,986).

Regarding claim 3, Kuroda discloses all limitations as analyzed in claim 2 for a progressive scan mode and that the integration time (electronic shutter) is always set at 16.7ms (1/60 second) which is the integration time of a conventional interlace scan mode regardless the imaging apparatus is operated in any mode. Kuroda does not explicitly teach a video camera

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apparatus for capturing both video and still images. However, it is well known that a video camera using CCD image sensor can be implemented to capture both video and still images as taught by Inuiya in col. 1, lines 10-20 and col. 2, lines 10-20.

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Kuroda and Inuiya to construct a video camera using a CCD image sensor that is fully capable of capturing both video and still images so as to offer users more options in capturing images.

Regarding claim 1, see the analysis of claim 3.

Regarding claim 4, see the analysis of claim 3.

Regarding claims 5 & 6, see the analysis of claim 3. Furthermore, Inuiya discloses that since the digital video magnetic tape can only record images under interlace format of 350,000 pixels. The high quality still picture of 1,400,000 pixels captured by the CCD that is buffered in the frame buffer 22 is converted into interlace format by portioning into four interlace frames of 350,000 pixels (see Inuiya Figs. 8, 11 and col. 17, lines 36-59). Therefore, the scan converter for converting the image sensing signal based on progressive scanning into an interlace scan signal is also met at the processing step for recording the image data onto the tape.

Regarding claims 7 & 8, see the analyses of claims 3 & 5. Inuiya further discloses recording means for recording the image sensing signal based on the progressive scanning, or the

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image sensing signal converted into the interlace scan signal; whereby a state is provided for storing still pictures according to said progressive scan mode; and whereby when said storing of a still picture according to said progressive scan mode is performed, the image information corresponding to said still picture is stored in a record medium such that upon playback of said still image information from said record medium said still picture will be displayed for a predetermined period of time. See Inuiya, col. 17, lines 25-59 and col. 19, lines 49-55.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Thursday, 8:00am - 6:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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James J. Groody
Supervisory Patent Examiner
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